20.

## AMENDMENTS TO THE CLAIMS

- 1. 15. (Canceled)
- (previously presented) The method of claim 20, wherein the sensor acquires
   MEG data.
- (previously presented) The method of claim 20, wherein the sensor acquires EEG data.
- (previously presented) The method of claim 20, wherein the sensor acquires ECG data.
- (previously presented) The method of claim 20, wherein the sensor acquires
   MCG data.

(currently amended) A method of evaluation comprising:

acquiring an electromagnetic physiological signal with a sensor on a subject;

performing a source reconstruction of the electromagnetic physiological signal via a
signal processing circuit in communication with said sensor, with said circuit being configured to
support multiple <u>parallel</u> threads of execution with one thread being a measurement module and
a second thread being a source reconstruction module;

using the source reconstruction to modify the acquisition of a new electromagnetic physiological signal; and

displaying source reconstruction results overlayed onto anatomical data of said patient.